II. IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) A method of configuring a scan in an imaging device, the method comprising the steps of:

completing a first data entry step including entering scan configuration data related to a first scan into a scan processing unit;

beginning a data acquisition step for **the** **[[a]]** first scan;

during the data acquisition step for the first scan, completing a **second** data entry step relating to a second scan, the **second** data entry step including entering scan configuration data related to the second scan into **the** **[[a]]** scan processing unit;

completing the data acquisition step for the first scan; and

beginning a data acquisition step for the second scan.

2. (original) The method of claim 1, wherein the data entry step comprises entering all data necessary for the imaging device to begin the second scan.

3. (original) The method of claim 1, wherein the step of beginning the data acquisition step for the second scan comprises:

commanding the imaging device to determine a next patient to be scanned;

verifying the identity of the patient arriving at the scanner; and

commanding the imaging device to begin the second scan.

4. (original) The method of claim 3, further comprising the step of specifying at least one criterion for determining a next patient to be scanned.

5. (original) The method of claim 1, wherein the data entry step comprises:

downloading information from a central database; and

entering data locally at a site where the scan takes place.

6. (original) The method of claim 5, wherein the step of entering data locally comprises entering radioactive tracer information.

7. (cancelled)

8. (currently amended) An imaging system comprising:

a detector which detects radiation during a data acquisition step of a scan;

at least one processor which controls configuration and execution of the scan; and

at least one memory which stores at least one computer program for executing the scan and data for configuration of the scan; wherein the processor is programmed to **conduct a first data entry step including entering scan configuration data related to a first scan,** conduct the data acquisition step for **the** [[**a**]] first scan, and during the data acquisition step for the first scan, conduct a data entry step for a second scan, the data entry step including entering scan configuration data related to the second scan.

9. (original) The imaging system of claim 8, wherein the system comprises a medical imaging device.

10. (original) The imaging system of claim 8, wherein the system comprises a positron emission tomography scanner.

11. (original) The imaging system of claim 8, wherein the system comprises a single photon emission computed tomography scanner.

12. (original) The imaging system of claim 8, wherein the system comprises an X-ray imager.

13. (original) The imaging system of claim 8, wherein the system comprises a computed tomography scanner.

14. (original) The imaging system of claim 8, wherein the system comprises a magnetic resonance imaging scanner.

15. (original) The imaging system of claim 8, wherein the at least one processor is programmed to allow an operator to specify at least one criterion for determining a next patient to be scanned.

16. (original) The imaging system of claim 8, wherein the processor is programmed to:

download information from a central database; and

receive data entered at a site where the scan takes place.

17. (original) The system of claim 16, wherein the data entered at the site where the scan takes place comprises radioactive tracer information

18. (cancelled)

19. (original) A method for configuring an imaging device comprising the steps of:

specifying at least one criterion for determining a next patient to be scanned from a plurality of scheduled patients;

querying a database with the at least one criterion; and

receiving an identification of the next patient to be scanned based on the at least one criterion.

20. (original) The method of claim 19, wherein the at least one criterion comprises a tracer injection time.

21. (original) The method of claim 19, wherein the at least one criterion comprises a patient arrival time.

22. (original) The method of claim 19, wherein the at least one criterion comprises a patient registration time.

23. (original) The method of claim 19, wherein the at least one criterion comprises a scheduled exam time.

24. (original) The method of claim 19, wherein the at least one criterion determines a scanning order for a plurality of scheduled patients, and

the method further comprises the step of receiving a scanning order for the plurality of scheduled patients based on the at least one criterion.

25. (previously presented) The method of claim 19, further comprising the steps of:

conducting a data acquisition step for a first scan, the data entry step including entering scan configuration data related to the second scan into a scan processing unit;

during the data acquisition step for the first scan, conducting a data entry step relating to a second scan.

26. (original) The method of claim 25, wherein the data entry step comprises:

downloading information from a central database; and

entering data locally at a site where the scan takes place.

27. (original) The method of claim 26, wherein the step of entering data locally comprises entering radioactive tracer information.

28. (original) The method of claim 26, wherein the step of entering data locally comprises entering data relating to a scan protocol.

29. (original) The method of claim 25, wherein the data entry step for the second scan is completed prior to completion of the data acquisition step of the first scan; and

wherein the step of querying the database is executed by the operator with one action; and

wherein the method further comprises the step of commanding the imaging device to begin the second scan with a single action.

30. (original) An imaging system comprising:

a detector which detects radiation during a data acquisition step of a scan;

at least one processor which controls configuration and execution of the scan; and

at least one memory which stores at least one computer program for executing the scan and data for configuration of the scan;

wherein the processor is programmed to allow an operator to specify at least one criterion for determining a next patient to be scanned from a plurality of scheduled patients, query a patient database with the at least one criterion, and receive an identification of the next patient to be scanned based on the at least one criterion.

31. (original) The system of claim 30, wherein the processor is programmed to generate a scanning order for the plurality of scheduled patients based on the at least one criterion.

32. (original) The imaging system of claim 30, wherein the at least one criterion comprises a tracer injection time.

33. (original) The imaging system of claim 30, wherein the at least one criterion comprises a patient arrival time.

34. (original) The imaging system of claim 30, wherein the at least one criterion comprises a patient registration time.

35. (original) The imaging system of claim 30, wherein the at least one criterion comprises a scheduled exam time.

36. (previously presented) The method of claim 1, wherein the scan processing unit controls the operation of the imaging device.

37. (currently amended) The imaging system of claim 8, **further comprising a scan processing unit,** wherein the scan processing unit controls the operation of the imaging device.